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| 09/855,827 | 05/15/2001 | Heng Chu | RSW920010061US1 | 9663 |

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| EXAMINER |
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RHODE JR, ROBERT E

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| ART UNIT | PAPER NUMBER |
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3625

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,827

Applicant(s)

CHU ET AL.

Examiner

Rob Rhode

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

Applicant amendment of 1-25-05 amended claims 1 – 6, 10, 11 – 17 and added new claims 18 – 20 as well as traversed rejections of Claims 1 – 17.

Currently, claims 1- 20 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 9, 11, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treyz (US 6,587,835 B1) in view of Delorme (US 6,321,158 B1).

Regarding Claim 1 and related claims 11 and 14 (currently amended), Treyz teaches a method and system of optimizing a shopping list process, comprising steps of:

obtaining a shopping list comprising a plurality of items and/or services to be obtained (see at least Abstract and Figures 24 and 32);

programmatically determining a plurality of merchants, locations thereof, from which the plurality of items and/or services maybe obtained. (see at least Co I2, lines 46 – 56 and Figure 28).

Although Treyz in the same area of online shopping does disclose providing a shopping list item by location and a marked path (Figure 42), the reference does not specifically disclose and teach a method for programmatically computing, in view of one or more shopping path optimization factors a shopping path comprises an ordered traversal among locations of the merchants, and wherein optimization factors comprises at least a minimum overall cost of obtaining the items and/or services.

On the other hand and in the same area of providing optimized paths, Delorme teaches a method and system for programmatically computing, in view of one or more shopping path optimization factors a shopping path comprises an ordered traversal among locations of the merchants, and wherein optimization factors comprises at least a minimum overall cost of obtaining the items and/or services (see at least Col 9, lines 25 – 30 and Col 51, lines 10 – 17). Please note that Delorme does not specifically disclose merchants. However, Delorme does disclose various businesses, which can be merchants. In that regard and for examination purposes, businesses were equated as equivalent to a merchant. Moreover and it is noted in the applicant's specification at page 14, lines 15 17 that well known algorithms such as "traveling salesman problem" are used to compute an overall and optimized shopping path based on input. In this regard, Delorme teaches that the optimized route is determined based upon input obtained and thereby optimizes the route including associated way points and as taught

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by applicant used a well known optimization approach based on a "traveling salesman problem" algorithm.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the method and system of Treyz with the method and system of Delorme to have enabled optimizing a shopping list process as recited in claim 1. Treyz discloses a method and system of optimizing a shopping list process, comprising steps of: obtaining a shopping list comprising a plurality of items and/or services to be obtained (see at least Abstract and Figures 24 and 32); programmatically determining a plurality of merchants, locations thereof, from which the plurality of items and/or services maybe obtained. (see at least Co I2, lines 46 – 56 and Figure 28). Delorme discloses a method and system for programmatically computing, in view of one or more shopping path optimization factors a shopping path comprises an ordered traversal among locations of the merchants, and wherein optimization factors comprises at least a minimum overall cost of obtaining the items and/or services (see at least Col 9, lines 25 – 30 and Col 51, lines 10 – 17). Thereby, one of ordinary skill in the art would have been motivated to extend the method and system of Treyz with a method and system for programmatically computing, in view of one or more shopping path optimization factors a shopping path comprises an ordered traversal among locations of the merchants, and wherein optimization factors comprises at least a minimum overall cost of obtaining the items and/or services. As a result and with these capabilities, the shopper's time involved in figuring out the merchants/businesses to visit in order to

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obtain the best priced product will be reduced as well as curtailing the time required to map out a route. Please note and as disclosed by Delorme the user can select various optimization factors. Moreover, these optimization factors can be determined as noted in the applicant's specification (Page 18, lines 15 – 17) by such well known algorithms such as "traveling salesman". In that regard, the method of Delorme while not specifically disclosing these kinds of well known algorithms such as "traveling salesman", Delorme does disclose the use of algorithms. In that regard it would have been obvious to one of ordinary skill to extend Delorme with a well known algorithm such as "traveling salesman to optimize the traversal to best fit the users selected factors. Thereby, the user can select these different factors to best fit their options desired, which will provide them additional choices in optimizing the shopping process.

Regarding claim 2, Delorme teaches a method wherein physical length for the shopping path is used in addition to, or instead of, minimum overall cost (Col 2, lines 54 – 56). Please note that Delorme discloses shortest route, which for examination purposes was equated as equivalent to physical length, since "shortest" teaches one of ordinary skill a "physical length."

Regarding claim 3 and new claim 20 as well as new claims 18 and 19, as noted above, Delorme teaches various optimization factors which can be used for computing an optimized path (see above claim 1).

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Regarding claim 4, Treyz teaches a method, wherein a minimum number of merchants from which the item and/or services may be obtained is used in addition to, or instead of, the minimum overall cost. (Figure 28).

Regarding claim 5 and related claims 12 and 15 (previously presented), Treyz teaches a method, further comprising the step of shopping at each successive one of the merchants on the computed shopping path, comprising steps of traveling to the location of the successive merchant, while at the traveled to location obtaining zero or more of the items and/or services from the shopping list; and programmatically remembering which items and/or services have been thus obtained (Abstract and Figure 11). Please note that Treyz discloses the function of "remembering" by saving for expense account reporting of the item purchased/obtained. Thereby, Treyz "remembers"/stores the item obtained, regardless of the number stores.

Regarding claim 9 (previously presented), Treyz teaches a method, wherein the programmatically determining step further comprises the step of contacting the merchants in a dynamic and automated manner to determine availability of the items and/or services on the shopping list (Abstract, Col 1, lines 41 – 46 and Figure 1).

Claims 6 – 7, 10, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Treyz and Delorme as applied to claims 1, 11 and 14 above, and further in view of Ogasawara (US 6,386,450 B1).

The combination of Treyz and Delorme substantially discloses and teaches the applicant's invention.

However, the combination does not specifically disclose and teach a method which includes a shopping path begins from an identified starting location and terminates at an identified ending location, which may be identical to the starting location as well as dynamically contacting merchants to determine availability of the items on the list; and comprising the step of computing a summary after visiting the selected merchants, wherein the summary comprises information pertaining to one or more of which merchants were visited; the remembered items which were purchased; a cost of the remembered items which were purchased; a count of merchants visited; a cost savings of the remembered items which were purchased.

Regarding claim 6 and related claims 13 and 16, Ogasawara teaches a method, further comprising steps of : after shopping at each successive one of the merchant's programmatically creating a revised shopping list which excludes the programmatically remembered items or services; and determining whether items and/or services expected to be available from a particular one of the merchants were available from the

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particular merchant, and if not, programmatically recomputing the shopping path after adding the items which were unavailable to the revised shopping list (Col 2, lines 61 – 67 and Figures 4, 5A and B and 6 - 9). Please note that Ogasawara does not refer specifically to merchants, rather to a merchant and defining an optimum shopping path for the shopper in the merchant's store. In this regard, it would have been obvious to add the capability to expand the geographical area as with Delorme and Treyz to include other merchants and specifically an enclosed area such as shopping mall containing multiple stores/merchants. Moreover, Ogasawara is not limited to just a single store and Treyz discloses remembering the items obtained at any time and any location. In this manner, the customer would be pleased and use the service capability in addition to include these other merchants, which will provide a larger potential selection of merchants as well as items. In this manner, the customer will likely recommend the service to others as result of these additional labor saving features.

Regarding claim 7, Ogasawara teaches a method, wherein the shopping path begins from an identified starting location and terminates at an identified ending location, which may be identical to the starting location (Col 3, lines 57 – 60 and Figures 8 - 9).

Regarding claim 10 (currently amended), Ogasawara teaches a method, further comprising the step of programmatically computing a summary after traveling to the selected merchant locations, wherein the summary comprises information pertaining to one or more of which merchant locations were traveled to; the remembered items and

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or services which were obtained; a count of merchants traveled to; a cost savings of the remembered items which were purchased (Col 1, lines 40 – 41, Col 16, lines 20 – 25 and Figures 4 and 5A).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the combination of Treyz and Delorme with the method and system of Ogasawara to have enabled, a method and system as recited in the above claims – in order to include the capability of remembering as well as updating a shopping list based on results from the current trip. The combination of Treyz and Delorme disclose a method and system for optimizing a shopping list process, as recited in claims 1 and 11 and 14. Ogasawara disclose a method and system as recited in claims 6 – 7, 10, 13 and 16 (Abstract, Col 2, lines 61 – 67 and Figures 4, 5A and B and 9). Therefore, one of ordinary skill in the art would have been motivated to extend the combination of Treyz and Delorme with a method and system which includes a shopping path begins from an identified starting location and terminates at an identified ending location, which may be identical to the starting location as well as dynamically contacting merchants to determine availability of the items on the list; and comprising the step of computing a summary after visiting the selected merchants, wherein the summary comprises information pertaining to one or more of which merchants were visited; the remembered items which were purchased; a cost of the remembered items which were purchased; a count of merchants visited; a cost savings of the remembered items which were purchased. In that regard, the shopper's burden for remembering everything, which will

eases their already overburdened minds and thereby increase their satisfaction. With this increased satisfaction, the probability is increased that their loyalty and continued use of this service for future shopping will also be increased.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Treyz and Delorme as applied to claim 1 above, and further in view of Jain (US 5,155,679).

The combination of Treyz and Delorme substantially disclose and teach the applicant's invention.

However, the combination does not specifically disclose and teach a method wherein one or more traveling salesman algorithm implementations are used by the programmatically computing step.

On the other hand and regarding claim 8 (currently amended), Jain teaches a method wherein one or more traveling salesman algorithm implementations are used by the programmatically computing step (Col 16, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the combination of Treyz and Delorme with the method of Jain to have enabled a method wherein one or more traveling salesman algorithm implementations

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are used by the programmatically computing step. The combination of Treyz and Delorme disclose a method and system for optimizing a shopping list process, comprising steps of: obtaining a shopping list comprising a plurality of items; obtaining one or more factors which a user wishes to use in optimizing a shopping path for the items on the shopping list; programmatically determining a plurality of merchants and locations thereof where the items may be purchased; and programmatically computing the shopping path such that the user can use the shopping path to travel among the locations of at least two selected ones of the merchants, wherein the merchants are selected according to the one or more obtained factors. Jain discloses a method wherein one or more traveling salesman algorithm implementations are used by the programmatically computing step (Col 16, line 3). Therefore, one of ordinary skill in the art would have been motivated to extend the combination of Treyz and Delorme with a method wherein one or more traveling salesman algorithm implementations are used by the programmatically computing step.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Treyz and Delorme as applied to claim 1 above, and further in view of Obradovic (US 2002/0038307).

The combination of Treyz and Delorme substantially disclose and teach the applicant's invention.

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However, the combination does not specifically disclose and teach a method wherein the nearest neighbor algorithm implementation is used by the programmatically computing step.

On the other and regarding claim 17 (new), Obradovic teaches a method wherein the nearest neighbor algorithm implementation is used by the programmatically computing step (Page 7, Para 0063).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the combination of Treyz and Delorme with the method of Obradovic to have enabled a method wherein the nearest neighbor algorithm implementation is used by the programmatically computing step. The combination of Treyz and Delorme disclose a method and system for optimizing a shopping list process, comprising steps of: obtaining a shopping list comprising a plurality of items; obtaining one or more factors which a user wishes to use in optimizing a shopping path for the items on the shopping list; programmatically determining a plurality of merchants and locations thereof where the items may be purchased; and programmatically computing the shopping path such that the user can use the shopping path to travel among the locations of at least two selected ones of the merchants, wherein the merchants are selected according to the one or more obtained factors. The combination of Treyz and Delorme disclose a method and system for optimizing a shopping list process, comprising steps of: obtaining a shopping list comprising a plurality of items; obtaining

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one or more factors which a user wishes to use in optimizing a shopping path for the items on the shopping list; programmatically determining a plurality of merchants and locations thereof where the items may be purchased; and programmatically computing the shopping path such that the user can use the shopping path to travel among the locations of at least two selected ones of the merchants, wherein the merchants are selected according to the one or more obtained factors. Obradovic discloses a method wherein the nearest neighbor algorithm implementation is used by the programmatically computing step (Page 7, Para 0063). Thereby, one of ordinary skill in the art at the time of the invention would have been motivated to extend the combination of Treyz and Delorme with a method wherein the nearest neighbor algorithm implementation is used by the programmatically computing step.

Response to Arguments

Applicant's arguments with respect to claims 1 - 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Rob Rhode** whose telephone number is **571.272.6761**. The examiner can normally be reached Monday thru Friday 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wynn Coggins** can be reached on **(703) 308-1344**.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **571.272.7159**.

Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, Va. 22313-1450

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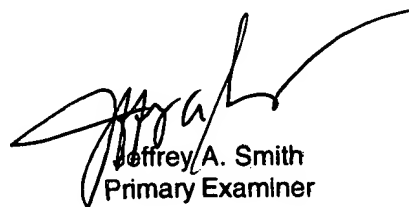
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[Informal/Draft communications, labeled

"PROPOSED" or "DRAFT"]

RER



Jeffrey A. Smith
Primary Examiner